RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 09/150,947 G

Source: _____ TFW 16

Date Processed by STIC: _____ 09/15/2005

ENTERED

IFW16

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RAW SEQUENCE LISTING              DATE: 09/15/2005
PATENT APPLICATION:  US/09/150,947G    TIME: 11:40:46

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\09152005\I150947G.raw
```

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 3 <110> APPLICANT: KAEMPFER, Raymond
 4        ARAD, Gila
 6 <120> TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS ANTAGONISTS VACCINES
 8 <130> FILE REFERENCE: KAEMPFER1
10 <140> CURRENT APPLICATION NUMBER: 09/150,947G
11 <141> CURRENT FILING DATE: 1998-09-10
13 <150> PRIOR APPLICATION NUMBER: PCT/IL97/00438
14 <151> PRIOR FILING DATE: 1997-12-30
16 <150> PRIOR APPLICATION NUMBER: ISRAEL 119938
17 <151> PRIOR FILING DATE: 1996-12-30
19 <160> NUMBER OF SEQ ID NOS: 15
21 <170> SOFTWARE: PatentIn version 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 12
25 <212> TYPE: PRT
26 <213> ORGANISM: Staphylococcus aureus
28 <400> SEQUENCE: 1
30 Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
31 1               5                   10
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 12
36 <212> TYPE: PRT
37 <213> ORGANISM: Staphylococcus aureus
39 <400> SEQUENCE: 2
41 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
42 1               5                   10
45 <210> SEQ ID NO: 3
46 <211> LENGTH: 10
47 <212> TYPE: PRT
48 <213> ORGANISM: Staphylococcus aureus
50 <400> SEQUENCE: 3
52 Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
53 1               5                   10
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 10
58 <212> TYPE: PRT
59 <213> ORGANISM: Staphylococcus aureus
61 <400> SEQUENCE: 4
63 Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
64 1               5                   10
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 13
69 <212> TYPE: PRT
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70  <213> ORGANISM: Staphylococcus aureus
73  <220> FEATURE:
74  <221> NAME/KEY: LIPID
75  <222> LOCATION: (1)..(1)
76  <223> OTHER INFORMATION: N-lauryl cysteine residue
78  <400> SEQUENCE: 5
80  Cys Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu Asp
81  1               5                   10
84  <210> SEQ ID NO: 6
85  <211> LENGTH: 13
86  <212> TYPE: PRT
87  <213> ORGANISM: Staphylococcus aureus
90  <220> FEATURE:
91  <221> NAME/KEY: LIPID
92  <222> LOCATION: (1)..(1)
93  <223> OTHER INFORMATION: N-lauryl cysteine residue
95  <400> SEQUENCE: 6
97  Cys Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp
98  1               5                   10
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 24
103 <212> TYPE: PRT
104 <213> ORGANISM: Staphylococcus aureus
106 <400> SEQUENCE: 7
108 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys
109 1               5                   10                  15
112 Lys Ala Thr Val Gln Glu Leu Asp
113             20
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 36
118 <212> TYPE: PRT
119 <213> ORGANISM: Staphylococcus aureus
121 <400> SEQUENCE: 8
123 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys
124 1               5                   10                  15
127 Lys Ala Thr Val Gln Glu Leu Asp Tyr Asn Lys Lys Lys Ala Thr Val
128             20                  25                  30
131 Gln Glu Leu Asp
132         35
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 14
137 <212> TYPE: PRT
138 <213> ORGANISM: Staphylococcus aureus
141 <220> FEATURE:
142 <221> NAME/KEY: DISULFID
143 <222> LOCATION: (1)..(1)
145 <220> FEATURE:
146 <221> NAME/KEY: DISULFID
147 <222> LOCATION: (14)..(14)
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149 <400> SEQUENCE: 9
151 Cys Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Cys
152 1               5                   10
155 <210> SEQ ID NO: 10
156 <211> LENGTH: 14
157 <212> TYPE: PRT
158 <213> ORGANISM: Staphylococcus aureus
161 <220> FEATURE:
162 <221> NAME/KEY: MOD_RES
163 <222> LOCATION: (1)..(1)
164 <223> OTHER INFORMATION: D-alanine
166 <220> FEATURE:
167 <221> NAME/KEY: MOD_RES
168 <222> LOCATION: (14)..(14)
169 <223> OTHER INFORMATION: D-alanine
171 <400> SEQUENCE: 10
173 Ala Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Ala
174 1               5                   10
177 <210> SEQ ID NO: 11
178 <211> LENGTH: 13
179 <212> TYPE: PRT
180 <213> ORGANISM: Staphylococcus aureus
183 <220> FEATURE:
184 <221> NAME/KEY: ACETYLATION
185 <222> LOCATION: (1)..(1)
187 <220> FEATURE:
188 <221> NAME/KEY: MOD_RES
189 <222> LOCATION: (13)..(13)
190 <223> OTHER INFORMATION: D-alanine
192 <400> SEQUENCE: 11
194 Tyr Asn Lys Lys Lys Ala Thr Val Gln Glu Leu Asp Ala
195 1               5                   10
198 <210> SEQ ID NO: 12
199 <211> LENGTH: 239
200 <212> TYPE: PRT
201 <213> ORGANISM: Staphylococcus aureus
203 <400> SEQUENCE: 12
205 Glu Ser Gln Pro Asp Pro Lys Pro Asp Glu Leu His Lys Ser Ser Lys
206 1               5                   10                  15
209 Phe Thr Gly Leu Met Glu Asn Met Lys Val Leu Tyr Asp Asp Asn His
210             20                  25                  30
213 Val Ser Ala Ile Asn Val Lys Ser Ile Asp Gln Phe Leu Tyr Phe Asp
214         35                  40                  45
217 Leu Ile Tyr Ser Ile Lys Asp Thr Lys Leu Gly Asn Tyr Asp Asn Val
218     50                  55                  60
221 Arg Val Glu Phe Lys Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp Lys
222 65                  70                  75                  80
225 Tyr Val Asp Val Phe Gly Ala Asn Tyr Tyr Tyr Gln Cys Tyr Phe Ser
226             85                  90                  95
```

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Input Set : **A:\sequence listing.txt**
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```
229 Lys Lys Thr Asn Asp Ile Asn Ser His Glu Thr Asp Lys Arg Lys Thr
230         100             105             110
233 Cys Met Tyr Gly Gly Val Thr Glu His Asn Gly Asn Gln Leu Asp Lys
234         115             120             125
237 Tyr Arg Ser Ile Thr Val Arg Val Phe Glu Asp Gly Lys Asn Leu Leu
238     130             135             140
241 Ser Phe Asp Val Gln Thr Asn Lys Lys Lys Val Thr Ala Gln Glu Leu
242 145             150             155             160
245 Asp Tyr Leu Thr Arg His Tyr Leu Val Lys Asn Lys Lys Leu Tyr Glu
246             165             170             175
249 Phe Asn Asn Ser Pro Tyr Glu Thr Gly Tyr Ile Lys Phe Ile Glu Asn
250             180             185             190
253 Glu Asn Ser Phe Trp Tyr Asp Met Met Pro Ala Pro Gly Asp Lys Phe
254         195             200             205
257 Asp Gln Ser Lys Tyr Leu Met Met Tyr Asn Asp Asn Lys Met Val Asp
258     210             215             220
261 Ser Lys Asp Val Lys Ile Glu Val Tyr Leu Thr Thr Lys Lys Lys
262 225             230             235
265 <210> SEQ ID NO: 13
266 <211> LENGTH: 10
267 <212> TYPE: PRT
268 <213> ORGANISM: Artificial
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Consensus sequence
274 <220> FEATURE:
275 <221> NAME/KEY: UNSURE
276 <222> LOCATION: (3)..(6)
277 <223> OTHER INFORMATION: Any amino acid
279 <400> SEQUENCE: 13
```
W--> 281 **Lys Lys Xaa Xaa Xaa Xaa Gln Glu Leu Asp**
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282 1               5               10
285 <210> SEQ ID NO: 14
286 <211> LENGTH: 12
287 <212> TYPE: PRT
288 <213> ORGANISM: Artificial
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Consensus sequence
294 <220> FEATURE:
295 <221> NAME/KEY: UNSURE
296 <222> LOCATION: (1)..(2)
297 <223> OTHER INFORMATION: Any amino acid
299 <220> FEATURE:
300 <221> NAME/KEY: UNSURE
301 <222> LOCATION: (5)..(8)
302 <223> OTHER INFORMATION: Any amino acid
304 <400> SEQUENCE: 14
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W--> 306 **Xaa Xaa Lys Lys Xaa Xaa Xaa Xaa Gln Glu Leu Asp**
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307 1               5               10
310 <210> SEQ ID NO: 15
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311 <211> LENGTH: 11
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Consensus sequence
319 <220> FEATURE:
320 <221> NAME/KEY: misc_feature
321 <222> LOCATION: (1)..(1)
322 <223> OTHER INFORMATION: Can be either Tyr or Thr
324 <220> FEATURE:
325 <221> NAME/KEY: UNSURE
326 <222> LOCATION: (3)..(8)
327 <223> OTHER INFORMATION: Any amino acid
329 <220> FEATURE:
330 <221> NAME/KEY: UNSURE
331 <222> LOCATION: (10)..(10)
332 <223> OTHER INFORMATION: Any amino acid
334 <400> SEQUENCE: 15
```
W--> **336 Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Glu Xaa Asp**
```
337 1               5                   10
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/15/2005
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Input Set : **A:\sequence listing.txt**
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 3,4,5,6
Seq#:14; Xaa Pos. 1,2,5,6,7,8
Seq#:15; Xaa Pos. 1,3,4,5,6,7,8,10

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:13,14,15

```
            VERIFICATION SUMMARY              DATE: 09/15/2005
            PATENT APPLICATION:  US/09/150,947G      TIME: 11:40:47

            Input Set : A:\sequence listing.txt
            Output Set: N:\CRF4\09152005\I150947G.raw

L:281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
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